Wilf Csaplar Jr.   Economics 280   Homework #6   Due **FRIDAY** 3/26

Place your name on the back of this sheet of paper and nowhere else. Staple your answers on the front of this sheet of paper. Failure to follow these directions will cost you 1 point. Your assignment will be typed, except graphs can be drawn by hand and mathematical equations can be done by hand. Failure to type it will cost you 10 points. If you use double-sided printing or print on the back of scrap paper, I will give you one additional point.

1) (20 points) Draw the MRC_L/MRP_L diagram. Illustrate the effects of an increase in the capital stock. Explain why the curve(s) moved as drawn. What happens to the wage rate and quantity of labor hired?

2) (30 points) Draw the isoquant/iso-cost diagram which has the rental rate on capital twice the wage rate. Explain how you know your diagram is an accurate depiction of w/r = ½. Find three points on the expansion path and explain how you found them. For the first two, determine if it is increasing, constant, or decreasing returns to scale. Explain your logic.

3) (30 points) Draw the isoquant/iso-cost diagram with two iso-cost lines which has the rental rate half of the wage rate. Explain how you know your diagram is an accurate depiction of w/r = 2. Illustrate an increase in the rental rate. Explain why the curve(s) moved as drawn. Given your diagram, are capital and labor complements or substitutes? Explain your logic.

4) (10 points) What is the slope of the isoquant? Prove that or explain the logic behind the equation.

5) (10 points) What is the equi-marginal principle for production? Explain why it should hold.